





“ROLE OF AYURVEDA IN THE MANAGEMENT OF OSTEOPOROSIS”- A SHORT REVIEW

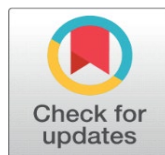
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ABSTRACT

Our advanced lifestyle gives luxury life to us. Fast food and fast life aggravate Vata dosha. This vata produced its own 80 types of diseases and other Awarana disease too. As Vata increases Asthi dhatu decreases. Decreased Asthi dhatu known as Asthi -kshaya. In modern, this can compare as osteoporosis. Osteoporosis means ‘poras bones’ when bone lose its minerals such as calcium than it becomes less dense, lose its strength and easily break. In early condition it’s not show any sign and symptoms and suddenly all symptoms occur. That’s why osteoporosis is called as silent disease.

Keywords: Osteoporosis, Asthi -Kahsyā, Ayurved, Management



1. INTRODUCTION

1.1. DEFINATION OF OSTEOPOROSIS

Osteoporosis is defined as a progressive systemic skeletal disease characterised by low bone mass and micro architectural deterioration of bone tissue with consequent increases in bone fragility and susceptibility to fracture. [Wikipedia \(2025\)](#)

2. CAUSES OF GENRALISED OSTEOPOROSIS [Riggs and Melton \(1992\)](#)

1) Senility

- Post immobilization
- Post menopausal
- Protein deficiency
- Inadequate intake at old age
- Illness malnutrition
- Excess protein loss at 3rd degree burns, CRF etc)

2) Endocrinal

- Cushing's disease
- Hyperthyroid state.

3) Drug induced

- Long term steroid therapy.

3. SIGNS AND SYMPTOMS OF OSTEOPOROSIS

- Bone pain (*Asthi toda*)
- Feeling of breaking of bone (*Asthi bheda*)
- fracture (*Anga Bheda*)
- Extreme fatigue (*srama*)
- Joint pain (*sandhi shool*)
- Periodontal disease (*Danta bhang*)
- Hair loss (*kesh patan*)
- Forward bending of spine (*vinamana*)
- Weakness (*bala kshaya*)
- Brittle and soft bone (*Asthi saushirya*)
- Difficulty in walking (*sandhi saushirya*)

4. GENRAL EXAMINATION OF OSTEOPOROSIS

The findings are subtle and can be missed. A slight loss of height and increased kyphosis due to compression of the anterior part of the vertebral bodies is seen in most causes.

1) Radiological feature

- Radiological evidence of decreed bone mass is more reliable, but about 30 % of the bone mass must be loss before it becomes apparent of x-rays. The following feature may be noticed on x-rays:

- Loss of vertical height of a vertebra due to collapse.
- Cod fish appearance: the disc bulges into the adjacent vertebral bodies so that the disc becomes bi-convex
- Ground glass appearance of the bone, conspicuous in bone like the pelvis.
- Singh's index: Singh et al. graded osteoporosis into 6 grades based on the trabecular pattern of femoral neck trabeculae.
- Metacarpal index and vertebral index are other method of qualification of osteoporosis.

2) Other investigations

- **Biochemistry:** serum calcium, phosphate alkaline phosphates are within normal limits. The total plasma proteins and albumin may be low.
- **Densitometry:** this is a method to quantify osteoporosis, where absorption of the photons emitted from the gamma emitting isotopes, by bone calcium is measured. Two types of densitometers are available- ultrasound based and x-ray based.
- **Bone biopsy:** sometimes bone biopsy also needs to rule out osteoporosis.

5. OSTEOPOROSIS IN AYURVED

In Ayurved osteoporosis can consider as *Asthi kshya*. In Ayurvedic Samhita description of *Asthi kshya* comes under dhatu *kshya*. In sutrastan maharshi charak described eighteen types of *kshaya* [Tripathi \(2011\)](#). As per *charak* Samhita, we can consider *Asthi kshay* is an independent disease. Description of sign and symptoms as well as aetiology of this disease found in Samhita.

Ashraya – *Ashrayi Bhava*: Description of Ashraya-Asharayi bhava found in *Ashtang Rudaya*. This theory helps to understand ayurvedic description and pathology of osteoporosis. *Asthi* is stan of vata dosha. As vata is increases *Asthi* decreases and vice versa. This relationship of *vata* and *Asthi* dhatu called as *Asharya Ashrayi Bhava*. Generally, increases or decreases dosha will increases or decreases compounds *Asharya* i.e dhatu mala. But this rule is not applicable for *vata* dosha and *Asthi dhatu*. [Garde \(2010\)](#)

6. TREATMENT OF OSTEOPOROSIS IN AYURVED

The line of treatment will be correction of *Asthi dhatwagni*.to rule out *vikruti* of former dhatu, to provide nourishment to the *Asthi* .to start regeneration process in the *Asthi* .to start regeneration process in the *Asthi*.

All the philosophy of *Asthi* dhatu takes place in *Asthi vaha srotus* and *Asthi dara kala*. The *Asthi dhara kala* lies in the *pakwashaya*, which is similar to large intestine. All the conversion into *Asthi* dhatu of different nourishing factor takes place in this part, because this is the seat of *Asthi dhatwagni*. Thus, all nourishment begins in *pakwashaya*.

Thus, the treatment occurs in 2 main parts -1 *shodhana* and 2 *shamana*.

Behind all the above mentioned *vikruti*, which are to be corrected, there is vitiation of *vata*, the basic body human, which governs almost all the body physiology.

Therefore, for correction of *vata*, the very first step is Basti, which is the medicine for *vata* as *shodhana* chikitsa. Basti mean enema of various oil, decoction, honey etc which cline the *pakwashaya*, regularize the *vata* and thus improve all body metabolism. As stated above *pakwashaya* is also the root of *Ashtidhara kala*.

7. LIFESTYLE CHANGES

- 1) **Daily exercise:** strengthens the bone.
- 2) **Stop smoking:** smoker have lower bone density than nonsmoker.
- 3) **Get some sun:** exposure of some skin to the sun needs to occur on most days of the week to allow enough vitamin D production.
- 4) **Drink alcohol in moderation:** excessive alcohol consumption increases the risk of osteoporosis.
- 5) **Limit caffeinated drinks:** excessive caffeine can affect amount of calcium that our body absorbs.

Some of the formulations useful in *Ashtikshya* (osteoporosis). *Yograj Gugul*, *Trayodashang Gugul*, *Laxshadi Gugul*, *Abhadi Gugul*, *praval Bhasma*, *AjAsthi Bhasma*, *Kukundatwak Bhasma*, *Dashamularishta*, *Bhbhul twak choorna*, *Bhbularishta*.

Panchkarma:

Snehana – *Sarvanga Abhayana* with *til tail*, *Lakshadi tail*, *chandanbala tail*.

Swadan: *Sarwanaga swedan*.

Basti: *panchtikta ghrit ksheerbasti*

Vata shamana: *Yograj guggul*, *Trayodashang guggul*, *Dashamularishta*, *Snehan*, *Swedan*.

Asthi poshana: *Lakshadi guggul*, *abhadi guggul*, *panchtiktaksheer basti*, *snehan*.

Rasayana: *til tail anuwasana basti*.

Thus, correction of *pakwashaya* status and modification of lifestyle helps in the improvement of bone physiology and prevent osteoporosis.

8. DISCUSION

In Ayurveda, Osteoporosis is not referred to by its modern name, but the condition is understood and described in terms of *Dhatu Kshaya* (the depletion of tissues) and *Vata-Vyadhi* (diseases caused by the disturbance of Vata dosha). Osteoporosis, which is characterized by the weakening of bones and increased susceptibility to fractures, aligns with these Ayurvedic principles, especially the imbalance of Vata dosha affecting the *Asthi dhatu* (bone tissue).

9. CONCLUSION

While Ayurveda does not specifically define osteoporosis as modern medicine does, the principles of Vata imbalance, *Dhatu Kshaya*, and the importance of proper nourishment and rejuvenation therapies provide a comprehensive approach to understanding and treating conditions that lead to bone weakening and fractures. Ayurvedic therapies, when combined with modern medical practices, can offer a holistic approach to managing and preventing osteoporosis.

CONFLICT OF INTERESTS

None.

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